This indicates that all of the increase in length of the affected shaft did not come from the epiphysis. In another case a large osseous defect in the skull, about two and one-half inches in diameter, was filled in by osseous fragments. The majority of them lived, grew, and threw out ossific matter sufficient to unite them individually to one another and to the rest of the uninjured cranium. Ten years later the skull was firm all over, the bone over the site of prior injury had grown in proportion to the rest of the skull. In a third case, the transverse ramus of the jaw, removed years before, was restored by transplantation of a piece of rib, of proper length to fill the gap. The rib was removed subperiosteally, and divided longitudinally into strips. These were inserted into the gap in the soft tissues, and secured to the ends of the bone on either side, so as to keep the right mandible in its proper position. The operation was done through an external incision below the jaw and the wound was closed over the transplanted bone and dressed. One small portion of bone was later shed. Six years after the operation the transplanted bone had thickened. The patient is now perfectly well, and can use the mouth freely for mastication; she speaks well, and the face is symmetrical.

Ligation of the Thyroid Vessels in Certain Cases of Hyperthyroidism.—MAYO (*Annals of Surgery*, 1909, l, 1018) says that the operation is indicated in those suffering from mild symptoms of hyperthyroidism, and those in whom the diagnosis is made early, possibly before the less important eye symptoms or even goitre is present. In cases, which are hardly severe enough to warrant a thyroidectomy, the ligation of the vessels will often produce a cure in a few weeks, with but little risk of special medication. It is indicated in that larger group of acute severe exophthalmic goitres, and in the chronic and very sick patients, who, having exhausted all forms of treatment, are now suffering with various secondary symptoms, dilatations and degeneration of the heart, fat liver, soft spleen, diseased kidneys, which have resulted from the toxins, as seen in the latter stage of Grave's disease, changes which are after all the final cause of death. All severe cases should be under observation for a short time at least and some cases for a considerable time, to improve their condition if possible, even before a ligation. 580 cases have been operated on at St. Mary's Hospital. Of these 225 were by ligation of the superior thyroid arteries and veins, 138 were ligated sufficiently long ago to make their report of value. There was slight improvement in 9 cases, great improvement in 44 cases, very marked improvement in 11 cases, 4 cases are absolutely well, and in 9 cases of questionable exophthalmic goitre, there was no improvement. In the majority of cases the ligation is made as a definite step in a graduated operation to reduce excessive secretion of the gland, and some of the cases are yet to be operated on for the removal of part of the gland as a secondary procedure.

Musculospiral Paralysis Complicating Fracture of the Humerus.—SCUDDER (*Annals of Surgery*, 1909, l, 1118) says that musculospiral paralysis occurs in from 4 to 8 per cent. of cases of fracture of the humerus. Fracture of the middle of the humerus is most frequently complicated by musculospiral paralysis. It may occur at any age from fracture of the humerus. It is primary if it dates from the accident and it is secondary if it is subsequent to the accident. Primary paralysis indicates a more severe injury to the nerve than does secondary paralysis. The diagnosis of the exact pathological condition of the nerve following trauma to it, is of the greatest importance and is difficult to determine. Progressive impairment of function or stationary paralysis of the nerve, complicating fracture of the humerus justifies and may demand operation. Operation means the release of the nerve from compression or tension and often resection and suture, and always guarding against recurrent compression or stretching. A late suture (months after the injury), is attended by technical difficulties not present in an early suture (soon after the injury). Resection of the humerus to allow of approximation of the divided ends of the musculospiral nerve is a good procedure (Allis, Philadelphia), but not until nerve suture *à distance* has first been carefully employed. Electrical reactions cannot determine the pathological condition. They are of value in determining the course of events. The prognosis after operation is good; the earlier a necessary operation is done the speedier the cure. Exercise of paralyzed muscles by electric stimulation (galvanism) is helpful. Sensory symptoms are variable; in general the sensory symptoms have no relation to the degree of motor loss.

Non-operative Reduction in the Treatment of Traumatic Coxa Vara and Valga.—SPRENGEL (*Zentralb. f. Chir.*, 1909, xxxvi, 1745) takes up especially the treatment of these conditions, the anatomical and clinical aspects having been discussed in previous papers on the subject. Almost without exception it begins with a trauma, which results in an epiphyseal separation of the femoral head. The obvious treatment, therefore, is to replace the separated surfaces in position. A case is reported in which the traumatic coxa vara came to treatment three days after the accident. The displacement was so slight that the real and functional shortening was only 1 cm. The external rotation, limitation of movement, age (seventeen years), the preceding injury, and the *x*-rays made the diagnosis positive. The replacement was effected in narcosis, by forcible extreme abduction, and as far as possible internal rotation with fixation in this position by plaster-of-Paris. This position was maintained with several changes of the plaster dressing until it reached only to the knee, for four months. The result was very satisfactory. The shortening and external rotation had disappeared. Abduction and internal rotation were slightly limited and there was little disturbance of the gait. A somewhat similar case of traumatic coxa valga is also reported. A thirteen-year-old student, six weeks before admission, had stepped in a hole, and was immediately seized with a severe pain in the right hip. There was associated external rotation and a marked disturbance of the gait. Three weeks before the accident, however, there was present a slight pain in the same hip. On admission, the right femur was markedly rotated externally, slightly abducted, and somewhat flexed. There was no functional shortening, but a real shortening of 2 cm. which was overcome by a sinking of the pelvis. The *x*-rays showed a separation of the epiphysis, with a displacement in the position